

## The Mines of Arizona

(This department is under the direction of Mr. W. T. Defty, the well known mining engineer, who will carefully scrutinize all matter relating to mining in order that only reliable information regarding legitimate enterprises shall find a place here.)

The Republican would be pleased to receive information from any part of the state regarding the development of the mining industry. All communications should be addressed Mining Department, Arizona Republican.

### The New Land Office Ruling.

"In order to make a valid location the locator must have pay ore in place."

This is about the most absurd and ridiculous ruling that the land office has ever made. If carried out to the letter it would simply kill seventy-five per cent of our prospective work. But in the last few years everything has been done by the land office and the forest reserve to discourage efforts for the prospecting and discovery of minerals. Petty little rulings and inflictions amounting to persecution are arbitrarily enforced against the men of the hills.

At Highgrade, the new camp in California the rangers have made the miners pay a ground rent for erecting a cabin and for the firewood which the prospector uses while working his prospect. Isn't the hardship he endures enough to qualify him for having enough firewood to keep him warm and to cook his grub? He doesn't carry it off of the ground, or ship it for gain and unquestionably what he does consume is dry, dead material that would be rotting on the ground. Where will such absurdity end? They may force the prospector soon to carry a linen table cloth with him so that he will not soil the grass and also insist in addition that he carry a fireless cooker.

Furthermore he might receive from the government, (gratis, of course,) a detailed and carefully prepared specification of the vein of ore body he will be compelled to find before locating. He might also be compelled to take a law course so that he can clearly understand the technical rulings of the land office and other institutions.

Also, it might be urged that he ought to take a course in entomology so that if he should come across some species of bug that was devouring the timber sold to him he could mount it on a slide and send it to the government. But, most important of all he should take lessons in diplomacy so that he would know how to respectfully approach the ranger. Surely the prospector of the future will have to spruce up. Picks, shovels, drills, goldpans and powder are useless. Let him pack his burro with editions showing him how to act and hike out for the hills.

See the absurdity of this ruling in Alaska where all coal lands are withdrawn from entry, a country that in every way should be given assistance and encouragement to develop. But, no, residents there must purchase high priced imported coal when the inhabitants are stubbing their toes on coal seams as they pass out of their cabin doors. And this, when it is a recognized fact that there is already enough known coal in Alaska to last for thousands of years.

I know of a mining property operated within sixty miles of Phoenix where they cut a little sparsely distributed cedar to keep the hoist and pumps running. But whether or not the pumps and hoist stopped and the mine filled with water the wood couldn't be touched until his emperor ship the ranger had given his consent.

There is only one solution for this problem and I have discovered it. Let every prospect and mine be moved near town and out of the confines of the forest reserve. But, putting jesting aside, how many low grade coppers would be developed today if such a ruling of the land office had been enforced?

Everyone who is cognizant of mining conditions in Arizona knows that the surfaces of the properties had excellent surface indications only and it took the deep drill holes to prove them out. What slight indications were on the surface were too impoverished to be classed as paying ore.

Again take the general copper ore bodies, everybody knows that it is a generally true statement that a copper mine is not a poor man's mine. You always have to go down for the ore. There may be nothing on the surface but the iron hat, absolutely without copper content. The ore is below this.

One of the best gold mines in Arizona today had surface ore running \$2 to \$3. In the position it was and with the economic conditions it was impossible to class the ore as paying ore. But well on to 200 feet in depth it was a bonanza and has been so ever since. Several conditions similar to this could be cited.

Let us help the prospector and the searcher after minerals instead of putting obstacles in his way and I feel sure that before long the authorities themselves will realize the absurdity of their rulings and will either modify or cancel them entirely. It has got to be done if mining is to prosper. Miners' associations are now forming in different parts of the country to fight against the late absurd and unjust ruling.

### A CHRISTMAS GIFT

It is very pleasing to relate a beneficial innovation in connection with the Homestake mine in South Dakota situated in the Black Hills. On Christmas, the men employed there will have distributed among them a bonus over and above their wages equal to seven per cent of the wages. This distribution will approximate a total of about \$200,000. It is indeed, a very substantial recognition of the employees' efforts and undoubtedly will be sincerely appreciated. Let us hope that this Christmas box will be a yearly event and that the practice will be emulated by other mine owners. It will go a long way toward making the boys contented and happy. The company is enjoying the most prosperous year in its history.

### THE GOLCONDA

The Golconda mine near Kingman is shipping on an average forty tons of concentrates a day which will average forty-five per cent zinc. This property is the largest zinc mine in Arizona and probably the biggest in the entire southwest. The mine is an old one and a cross-cut is being run to get under the old workings. These produced considerable silver values in years gone by. The mine has evidently a long life and at present about seventy-five men are employed.

### A NEW GOLD STRIKE

A reported rich gold strike has been made by Chris Yaeger about fourteen miles southeast of Yuma in Yuma county near the old Fortuna gold mine which has a record of large production. The vein is said to be four feet wide with a contact of schist and granite. The quartz is somewhat brecciated with a cementation of spar and iron. The croppings can be traced for a considerable distance. Values range from \$10 to \$200 according to Mr. Yaeger. This is a good country and has produced very rich ore.

All the country and claims about the Gold Roads, the Tom Reed and Ben Harrison mines are receiving a great deal of attention. This area is on the eve of energetic exploitation.

Negotiations are under way for the purchase of the property owned by the Commonwealth Extension company. There are ten claims in the group and they adjoin the old Commonwealth mine at Pearce, Cochise county, which was a great producer in its time. John Brockman bonded the Commonwealth and took the purchase price out of the mine before the payments became due. The present deal is said to be with Bisbee capitalists. Little work has been done but the vein is said to carry very substantial values.

### THE CANANEA CONSOLIDATED

On November 21 the Cananea Consolidated Copper company made the record run in its history and the general run for the month is expected to be the biggest since the smelter started. All of the eight furnaces are in operation, also the seven concentrators, and two reverberatory furnaces.

The Patagonia district continues to hold unabated interest and attention. There is great activity and unceasing talk regarding the camp. It is rumored that the El Paso & Southwestern will extend its line from Hua chuca to Patagonia camp.

It is reported that active operations are about to be commenced on the prospects of the Duquesne and Westinghouse camps in Santa Cruz county. These prospects are low grade ore bodies and are able to produce large tonnage. It is said that a contract has been made by the Copper Queen smelter to receive the ores for reduction.

The final grade stakes for the projected railroad to Superior have been driven and it is rumor that actual construction will commence soon. In connection with the railroad there is on tap a merging of several companies. If this is accomplished there will be no doubt concerning the construction of the road.

### THE CALUMET AND ARIZONA

There is more than an even chance that at the forthcoming meeting of the Calumet & Arizona directors the quarterly dividend will be increased to \$1.25 or \$1.50 per share against present rate of \$1. Current earnings justify the increase, but directors are inclined to go slowly in view of the \$3,000,000 which is being spent for smelter reconstruction. Smelter payments amounted to \$75,000 in 1911, and this year an additional \$1,250,000 will be paid, leaving approximately \$1,700,000 for next year. Construction work has been going on extremely well, and it now looks as if the new plant would be completed by next August instead of September as originally planned. The company is fortunate in getting its steel orders in before the boom set in, so that deliveries have not been delayed.

Although the new plant is not expected to give Calumet & Arizona any very large increase in productive capacity—say 60,000,000 pounds of copper against about 50,000,000 pounds at present—it is expected to make possible a very material reduction in costs, certainly more than enough to offset the recent advance in wages.

Calumet & Arizona's costs this year will not be far from 7 cents per pound, a figure which will be eminently satisfactory to the management. This would represent a net saving of .45 cent per pound as compared with 1911, but in reality it will be more because the increase in wages amounts to about \$120,000 per annum, or substantially a quarter of a cent per pound of copper produced. While it is not probable that the combined properties will ever produce their copper at such a low cost as was attained by Calumet & Arizona in its early days, this is due entirely to the decrease in copper content of the Calumet & Arizona ores, as actual cost of mining and treating a ton of ore is lower today than ever before.

### THE OCTAVE

The Octave mining company has been in bankruptcy for two years with John G. Page as receiver. Last week the property was freed from the courts and it has been taken over by the re-organization committee represented by H. C. Gibbs of

Boston. The settlement was made on a basis of \$35,000 cash and \$140,000 in assigned claims. Nearly the whole of the monetary claims were held by members of the old company.

The sale was confirmed by Judge Sloan and the bankruptcy proceedings and the receivership will be discharged as soon as the necessary obligations are complied with. The Octave mine has an excellent record and has produced over \$2,000,000 since being worked by the company. It had a ten stamp mill that produced before the company took it over. At present there is a forty stamp mill, cyanide plant and all the necessary buildings and equipment for successful mining. It is a well organized camp. The main shaft is down over 1200 feet with drifts extending on both sides for long distances. A large amount of stoping has been done on a strong persistent quartz vein averaging from four to twelve feet in width and there is a large tonnage of ore left in the mine ready for stoping. There is every probability of the property again starting up at an early date and it will mean much for the district again to have this producer in operation. The mine undoubtedly has a long life before it as the vein affords every indication of going to much greater depth.

### THE INSPIRATION

A contract has just been closed by General Manager C. E. Mills with the American Bridge Company for the delivery of 8000 tons of structural steel for the new Inspiration smelter, near Miami. Deliveries are to commence within three months, and preparation of the site has been started. The new plant will cover about eight acres of ground and will have daily capacity for the treatment of 7500 tons of ore.

The Sapphire Gold and Copper company has purchased the properties of the Monti Verdi, the Lady Bird and Deadwood mines in Mohave county, Arizona, from C. A. Thurston of the Chicago Northwestern railroad company, according to advices from the local offices of the company. A considerable quantity of excellent ore has already been mined from the various properties, and the surface showing of mineral is considered excellent, it is stated. The Sapphire company's claims are producing a class of ore that is seldom found except at great depth. It is said that the company will probably lease a portion of its properties before erecting the proposed reduction work, as many applications for leases are received. The company expects to start a large working shaft on the Lady Bird mine about January 1.

Foundations are being laid for a new mill at the Commonwealth mine at Pearce. Both bills erected on the property were destroyed by fire. The ore reserves are estimated at 289,543 tons, worth \$1,983,100.

The Gibson property near Globe is shipping about five carloads of charcoal ore per month that will average 15 per cent copper. Thirty-five men are employed at the mine.

The Calumet & Arizona Co. has sixty men at work drilling the New Cornelia property 125 miles west of (Continued on Page Elah)

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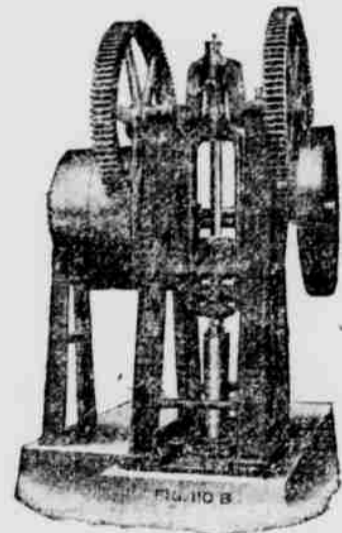
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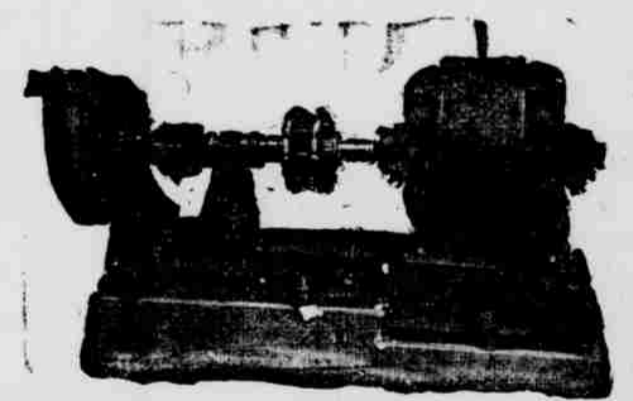
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